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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/215,951	12/18/1998	JOSEPH P. FELL	659/489	1434

757 7590 01/18/2002

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/18/2002

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/215,951

Applicant(s)

FELL ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-18 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18 and 48-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

RESPONSE TO AMENDMENT

1. In view of the appeal brief filed on October 1, 2001, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 102 rejection of claims 1-12, 14-18 and 48-50 as anticipated by Pieniak (5,098) of record in paper #5, pages 6-7, paragraph #9 have been withdrawn.

3. The 35 U.S.C. 102 rejection of claims 1-12, 14-18 and 48-50 as anticipated by Kielpikowski (6,056,733) of record in paper #5, pages 7-8, paragraph #11 have been withdrawn.

NEW REJECTIONS

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

5. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “slightly” in claim 2 is a relative term and renders the claims vague and indefinite. The term is held indefinite because the specification lacks a standard for measuring the degree intended.

The term “roughly” in claim 3 is a relative term and renders the claims vague and indefinite. The term is held indefinite because the specification lacks a standard for measuring the degree intended.

Claim Rejections - 35 USC § 102

6. Claims 1, 3, 5-9, 15, 17, 18, and 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (3,371,668).

Johnson discloses a nonwoven liquid permeable cover (col. 4, lines 74-75) for a sanitary napkin comprising parallel elastic strands sandwiched between two webs of individualized fibers (col. 1, lines 10-13 and col. 4, lines 29-32). The cover is constructed by holding the parallel strands of elastic under tension, sandwiching them between two webs of individualized fibers and then bonding the three layers with bond material in a wavy-line pattern. From figure 1 it can be seen that the wavy bond lines are approximately the same size and are spaced approximately equally apart from each other, which creates zones of attachment and unattachment.

After the composite cover is assembled the tension in the elastic strands is released, each of the strands relaxes and created a multitude of buckles, which extend transversely to the longitudinal direction of the strands. See column 4, lines 29-46, and figures 1 and 2. In construction the elastic strands in the laminate have been tensioned sufficiently during manufacture to permit 100% extension of the finished fabric, i.e. after bonding of the sandwiched strands, which are extended to a little better than twice their original length; release of tension provides a buckled fabric which, in this instance, can be extended to twice its length (col. 4, lines 55-61).

The liquid permeable webs are constructed with a repeating pattern of voids (breathable) spanning the length and width of each web (col. 4, lines 47-49). The edges of the cover are overlapped and bonded (stiffened edge) in position along the non-body-contacting face of the napkin (col. 5, lines 30-33 and figure 4).

7. Claims 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (5,209,801).

Smith discloses a disposable elastic structure for use as sweat bands, bandages, athletic supporters, support straps for incontinence devices and the like (col. 1, lines 26-29). The elastic structure comprising a first outer breathable layer, a central layer of a multiplicity of nonintersecting elastic strands, and a second outside breathable layer joined together. The structure is achieved by forming a layer of nonintersecting elastic strands, tensioning the strands, positioning the tensioned strands between two layers of breathable material, joining the layers together, and releasing the tension in the strands and thereby permitting them to contract and draw the outer layers into pleats or shirrs. The nonintersecting elastic strands are typically

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configured so that they are slightly out of parallel and/or irregularly spaced and/or nonuniformly tensioned so as to cause the pleats to form slightly irregularly. See col. 2, lines 53-68. The breathable material layers are bonded to the nonintersecting elastic strand layer by adhesive, which is patterned (col. 5, lines 27-31 and figure 6) creating attached and unattached zones.

The nonintersecting elastic strands can either be a plurality of strands or a single strand made of Lycra (col. 3, lines 51-60 and figures 1 and 6).

The final structure is equipped with a closure (stiffened edge) at the edges (col. 6, lines 11-15). The resulting structure is both breathable and liquid permeable (col. 6, lines 15-16).

8. Claims 48-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrin et al. (5,706,524).

Herrin discloses a disposable undergarment waistband comprising a first elongate layer of non-woven material, a plurality of elongate elastic strips, and a second elongate layer of non-woven material (col. 2, lines 59-67). An adhesive or glue preferably is positioned in a uniform pattern is used to secure the layers together, creating attached and unattached zones. See column 5, lines 36-54. The elastic strips are secured to the first and second elongate layer in stretched condition and gathers are formed in the first and second layer when the elastic strips are relaxed. The waistband further comprises hook and loop type fasteners at each respective edge. See column 6, lines 21-37.

The first and second layers are preferably non-woven fabric material, which can either be breathable or non-breathable. The fabric material preferably includes a plastic or polymeric material either formed integrally therewith or attached as a thin layer to the non-woven material to provide securing of the layers. See column 5, lines 54-60.

Claim Rejections - 35 USC § 102/103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, 4, 6-9, 15, 17, and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith (5,209,801).

Smith discloses a disposable elastic structure for use as sweat bands, bandages, athletic supporters, support straps for incontinence devices and the like (col. 1, lines 26-29). The elastic structure comprising a first outer breathable layer, a central layer of a multiplicity of nonintersecting elastic strands, and a second outside breathable layer joined together. The structure is achieved by forming a layer of nonintersecting elastic strands, tensioning the strands, positioning the tensioned stands between two layers of breathable material, joining the layers together, and releasing the tension in the strands and thereby permitting them to contract and draw the outer layers into pleats or shirrs. The nonintersecting elastic strands are typically configured so that they are slightly out of parallel and/or irregularly spaced and/or nonuniformly tensioned so as to cause the pleats to form slightly irregularly. See col. 2, lines 53-68. The breathable material layers are bonded to the nonintersecting elastic strand layer by adhesive, which is patterned (col. 5, lines 27-31 and figure 6) creating attached and unattached zones.

The nonintersecting elastic strands can either be a plurality of strands or a single strand made of Lycra (col. 3, lines 51-60 and figures 1 and 6).

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The final structure is equipped with a closure (stiffened edge) at the edges (col. 6, lines 11-15). The resulting structure is both breathable and liquid permeable (col. 6, lines 15-16).

Although Smith does not explicitly teach the limitations the maximum elongation of the composite is at least about 95% of the elongation of an elastic member, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. Lycra elastic strands sandwiched between breathable webs) and in the similar production steps (i.e. tensioning the elastic strands when bonding to the breathable webs) used to produce the elastic structure. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed elongation would obviously have been provided by the process disclosed by Smith. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

11. Claims 1, 3, and 5-18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Herrin et al. (5,706,524).

Herrin discloses a disposable undergarment waistband comprising a first elongate layer of non-woven material, a plurality of elongate elastic strips, and a second elongate layer of non-woven material (col. 2, lines 59-67). An adhesive or glue preferably is positioned in a uniform pattern is used to secure the layers together, creating attached and unattached zones. See column 5, lines 36-54. The elastic strips are secured to the first and second elongate layer in stretched condition and gathers are formed in the first and second layer when the elastic strips are relaxed. The waistband further comprises hook and loop type fasteners at each respective edge. See column 6, lines 21-37.

The first and second layers are preferably non-woven fabric material, which can either be breathable or non-breathable. The fabric material preferably includes a plastic or polymeric material either formed integrally therewith or attached as a thin layer to the non-woven material to provide securing of the layers. See column 5, lines 54-60.

Although Herrin does not explicitly teach the limitations the maximum elongation of the composite is at least about 95% of the elongation of an elastic member, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. elastic strands sandwiched between non-elastic webs) and in the similar production steps (i.e. tensioning the elastic strands when bonding to the non-elastic webs) used to produce the elastic structure. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed elongation would obviously have been provided by the process disclosed by Herrin. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

12. Claims 1, 2, 4, 6-9, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,209,801) in view of Vander Wielen et al. (4,720,415).

Smith does not explicitly teach the limitations the maximum elongation of the composite is at least about 95% of the elongation of an elastic member.

Vander Wielen discloses a composite elastomeric material comprising an elastic web held in tension sandwiched between two gatherable webs and bonded together. Gather form in

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the unbonded sections of the gatherable webs after the tension is released in the elastic web. See column 13, line 15 to column 14, line 68 and figure 2A.

Vander Wielen further discloses that the stretchable composite material elongation is dependent on the amount the elastic web is stretched, i.e. if it is desired to prepare a composite material stretchable to 100 percent elongation, a 100 cm length of elastic web may be stretched to a length of, for example 220 cm (120 percent elongation) and bonded at spaced-apart locations to a 220 cm length of non-elastic material. See column 9, lines 24-60.

If the maximum elongation is not inherent to Smith then, the exact maximum elongation of the composite is deemed to be a cause effective variable with regard elongation of the elastic member when bonded to the nonelastic webs. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as maximum elongation of the composite, as similarly taught by Vander Wielen, through routine experimentation in the absence of a showing of criticality in the claimed maximum elongation. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). It is desirable to have a high maximum elongation, such as 85% or higher, because the more the structure can elongate the longer the structure becomes in length and is capable of surrounding bigger items. This enables the elastic structure to fit a wider variety of shapes and sizes.

13. Claims 1, 3, and 5-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrin et al. (5,706,524) in view of Vander Wielen et al. (4,720,415).

Herrin does not explicitly teach the limitations the maximum elongation of the composite is at least about 95% of the elongation of an elastic member.

Vander Wielen discloses a composite elastomeric material comprising an elastic web held in tension sandwiched between two gatherable webs and bonded together. Gather form in the unbonded sections of the gatherable webs after the tension is released in the elastic web. See column 13, line 15 to column 14, line 68 and figure 2A.

Vander Wielen further discloses that the stretchable composite material elongation is dependent on the amount the elastic web is stretched, i.e. if it is desired to prepare a composite material stretchable to 100 percent elongation, a 100 cm length of elastic web may be stretched to a length of, for example 220 cm (120 percent elongation) and bonded at spaced-apart locations to a 220 cm length of non-elastic material. See column 9, lines 24-60.

If the maximum elongation is not inherent to Herrin then, the exact maximum elongation of the composite is deemed to be a cause effective variable with regard elongation of the elastic member when bonded to the nonelastic webs. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as maximum elongation of the composite, as similarly taught by Vander Wielen, through routine experimentation in the absence of a showing of criticality in the claimed maximum elongation. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). It is desirable to have a high maximum elongation, such as 85% or higher, because the more the structure can elongate the longer the structure becomes in length and is capable of surrounding bigger items. This enables the elastic structure to fit a wider variety of shapes and sizes.

14. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (3,371,668) or Herrin et al. (5,706,524) in view of Smith (5,209,801).

Both Johnson and Herrin disclose all the limitations of the instant claimed invention except for the elastic members are slightly out of parallel and the elastic members comprise a single strand.

Smith discloses a disposable elastic structure for use as sweat bands, bandages, athletic supporters, support straps for incontinence devices and the like (col. 1, lines 26-29). The elastic structure comprising a first outer breathable layer, a central layer of a multiplicity of nonintersecting elastic strands, and a second outside breathable layer joined together. The structure is achieved by forming a layer of nonintersecting elastic strands, tensioning the strands, positioning the tensioned stands between two layers of breathable material, joining the layers together, and releasing the tension in the strands and thereby permitting them to contract and draw the outer layers into pleats or shirrs. The nonintersecting elastic strands are typically configured so that they are slightly out of parallel and/or irregularly spaced and/or nonuniformly tensioned so as to cause the pleats to form slightly irregularly. See col. 2, lines 53-68. The breathable material layers are bonded to the nonintersecting elastic strand layer by adhesive, which is patterned (col. 5, lines 27-31 and figure 6) creating attached and unattached zones.

The nonintersecting elastic strands can either be a plurality of strands or a single strand made of Lycra (col. 3, lines 51-60 and figures 1 and 6).

The final structure is equipped with a closure (stiffened edge) at the edges (col. 6, lines 11-15). The resulting structure is both breathable and liquid permeable (col. 6, lines 15-16).

It would have been obvious to one of ordinary skill in the art to make the elastic stands of either Johnson or Herrin slightly out of parallel and/or with one strand as taught by Smith

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because the effect of having the pleats form slightly irregularly reduces folds that can pinch skin or pull hairs.

15. Claims 10-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (3,371,668) in view of Dobrin (5,843,066).

Johnson discloses all the limitations of the instant claimed invention except for the first or second layer comprising non-breathable or water impervious material.

Dobrin discloses that is known that the disposable absorbent articles can be covered with a flexible, liquid and vapor impervious sheet to prevent any absorbed liquid from passing through and soiling adjacent articles such as clothing. See column 1, lines 17-21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a liquid or vapor impervious sheet as either the first or second layer in Johnson for the side not adjacent the body because it would prevent liquid from passing through and soiling adjacent articles such as clothing.

ANSWERS TO APPLICANT'S ARGUMENTS

16. Applicant's arguments filed in paper #22 regarding the 35 U.S.C. 102 rejections of record have been carefully considered but are moot since the rejection have been withdrawn.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith (4,977,011) and Tharpe (5,870,778) also disclose similar stretchable composite material.

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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Blaine Copenheaver can be reached by dialing (703) 308-1261. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

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